

CIRCULAR NO. 25.

UNIVERSITY OF ILLINOIS
Agricultural Experiment Station.

URBANA, ILL., JUNE, 1900.

INQUIRY CONCERNING SMUT OF OATS.



CUT SHOWING SMUT OF OATS.

Heads at left injured by "Hidden Smut," those on the right destroyed by "Loose Smut." The center head is not affected.

The loss to the farmers of Illinois due to smut in the oat crop is usually underestimated. The percentage of smutted heads in the fields of oats as reported by a large number of farmers last year

would indicate a loss of not less than \$2,250,000. In view of the great importance of a more complete knowledge of the extent of the injury from this fungous disease it is desired that you coöperate with the Agricultural Experiment Station and kindly assist us in gaining information in regard to the amount of loss for 1900.

You can help us very greatly in this work if you will determine the per cent. of smut in the fields of oats on your farm, and, if possible, your neighbors' farms. In order to determine the per cent. of smutted heads take an ordinary barrel hoop or light frame of any kind of convenient size and throw over a spot in the field, selected at random. Count all of the stalks inside the hoop and note the number on the blank given on last page of this paper. Now count the stalks affected by smut and set down in the proper column of the same blank. Repeat this operation in three or more places in every field in order to get an average of smutted stalks for the field.

Caution.—Care should be taken that none of the smutted stalks are passed by unnoticed.

1. The smutted stalks are usually shorter than the healthy ones and consequently are overlooked in counting.

2. The smutted heads do not always push out of the sheath and these stalks are counted as merely dwarfed plants, when if the sheath is unrolled the head will be found to be smutted.

3. The smut appears early, and by the time the oats are ripe has been mostly whipped off by the wind, in many instances leaving only a bare stalk or stub.

The so-called blighting of oats is generally caused by smut, although the smut may have disappeared entirely. The counting of the smut in the oats should be done as soon as they are fully headed out.

You will confer a great favor upon the Agricultural Experiment Station of the University of Illinois by filling out this circular and mailing at once to to the Station.

A. D. SHAMEL,
Department of Agronomy.

BLANK FOR FILLING OUT AND RETURN

TOTAL NUMBER OF STALKS IN HOOP

NUMBER OF STALKS WITH SMUTTED HEADS

Field 1	{	Test 1 .....	.....
		Test 2 .....	.....
		Test 3 .....	.....
Field 2	{	Test 1 .....	.....
		Test 2 .....	.....
		Test 3 .....	.....
Field 3	{	Test 1 .....	.....
		Test 2 .....	.....
		Test 3 .....	.....
Field 4	{	Test 1 .....	.....
		Test 2 .....	.....
		Test 3 .....	.....

Name of variety, if known

Early or late

Where was seed obtained?

Did you screen or fan your oats?

Name

Postoffice address

County